

CLAIMS

[1] A printing ink system for printing a printed matter for IT-dependent, printed-matter-linked shopping, said printed matter being useful in a sales method of a merchandise that:

(1) a purchaser chooses said merchandise as a desired merchandise from merchandise information shown in said printed matter for IT-dependent, printed-matter-linked shopping, and shoots a corresponding section by information terminal equipment provided with a shooting function and transmitting function (step 1),

(2) a merchandise information image of the thus-shot section is converted into electrical signals, and said electrical signals are transmitted to a retailer via a predetermined communication network to order the thus-shot merchandise (step 2),

(3) electrical signals of image information, which have been transmitted corresponding to said order for said merchandise in a predetermined format via said communication network, are received, and are then processed such that a reply corresponding to said image information is sent to confirm said order for said merchandise and to accept said order (step 3),

(4) said merchandise is delivered from said retailer to said ordering person (step 4), and then

(5) an accounting of a merchandise bill is performed

(step 5), wherein said printing ink system comprises a combination of:

(I) a printing ink (a) for printing a visible picture (A) of said merchandise in said printed matter for IT-dependent, printed-matter-linked shopping (which may hereinafter be called "said merchandise picture printing ink"); and

(II) a printing ink (b) for printing a merchandise information code (B) which can be converted into electronic information via said image shot by said image shooting information equipment and can be recognized (which may hereinafter be called "said merchandise information code printing ink").

[2] A printing ink system according to claim 1, wherein said merchandise information code (B) contains information on at least one of a uniform resource locator of said retailer, a title and date of an advertisement, and details and a code number of said merchandise.

[3] A printing method of a printed matter for IT-dependent, printed-matter-linked shopping as described in claim 1, wherein said merchandise information code is a barcode, two-dimensional code or digital watermark.

[4] A printing ink system according to claim 1, wherein:
said merchandise picture printing ink (a) is a printing ink selected from printing inks comprising 1 to 8 colored inks and special color inks useful in general printing; and

said merchandise information code printing ink (b) is a printing ink selected from:

(1) a printing ink (b-1) for printing a visible information code consisting of "0"/"1" digital signals and visible to the naked eye,

(2) a printing ink (b-2) for printing an invisible information code consisting of "0"/"1" digital signals and invisible to the naked eye, or

(3) a printing ink (b-3) for printing an information code obtained by dividing said picture of said merchandise into microareas and converting said microareas into "0"/"1" digital signals, said information code being invisible to the naked eye or unrecognizable by the naked eye.

[5] A printing ink system according to claim 4, wherein said printing ink (b-1) for printing said information code visible to the naked eye is a printing ink (b-1) of a single color, 2-8 colors or a special color selected from the group consisting of cyan, magenta, yellow, black, orange, green, purple and brown.

[6] A printing ink system according to claim 4, wherein said printing ink (b-1) for printing said information code visible to the naked eye comprises a colorant having light fastness of at least class 5.

[7] A printing ink system according to claim 4, wherein said printing ink (b-2) for printing said information code invisible to the naked eye is:

(1) a printing ink (b-2-1) comprising a fluorescent colorant capable of providing a print, which is practically non-chromatic or light chromatic under visible light and is excited by ultraviolet rays to emit a fluorescent color in a visible light range, or

(2) a printing ink (b-2-2) comprising a near infrared absorbing colorant capable of providing a print, which is non-chromatic, light chromatic or chromatic under visible light and has an absorption in a near infrared range.

[8] A printing ink system according to claim 4, wherein said printing ink (b-3) for printing said information code, which has been obtained by dividing said picture of said merchandise and is invisible to the naked eye or unrecognizable by the naked eye, is:

(1) a printing ink (b-3-1) for imprinting in said merchandise picture a cryptographic system, which divides said merchandise picture into microareas and converts each of said microareas into "0"/"1" digital signals while taking each cell as a single unit, or

(2) a printing ink (b-3-2) for imprinting in said merchandise picture a cryptographic system, which converts said merchandise picture into digital signals by dividing said merchandise picture into microareas, dividing each of said microareas into two or more cells as a single unit, and arranging a group of "1" signal cells linearly in a group of "0" signal cells to impart regularity to a distribution

of "0"/"1" digital signals.

[9] A printing method of a printed matter for IT-dependent, printed-matter-linked shopping in an IT-dependent, printed-matter-linked shopping system comprising a sales method of a merchandise that:

(1) a purchaser shoots by an image shooting information equipment an image section shown in said printed matter for IT-dependent, printed-matter-linked shopping, which has been distributed to said purchaser, and containing a picture (A) of said merchandise as a desired merchandise and a relevant merchandise information code (B) (step 1),

(2) a merchandise information code image in the thus-shot section is converted into electrical signals, and said electrical signals are transmitted to a retailer via a predetermined communication network to order the thus-shot merchandise (step 2),

(3) electrical signals of image information, which have been transmitted corresponding to said order for said merchandise in a predetermined format via said communication network, are received, and are then processed such that a reply corresponding to said image information is sent to confirm said order for said merchandise and to accept said order (step 3),

(4) said merchandise is delivered from said retailer to said purchaser (step 4), and then

(5) an accounting of a merchandise bill is performed

(step 5), wherein:

said printing method comprises printing both of said merchandise picture (A) and said merchandise information code (B) with said merchandise image printing ink (a) and said merchandise information code printing ink (b), respectively, in the same merchandise section on a sheet of paper.

[10] A printing method according to claim 9, wherein as said merchandise information code, a barcode is printed with bar width dimensions of at least 0.20 mm, or a two-dimensional code is printed with cell sizes of at least 0.25 mm.

[11] A printed matter for IT-dependent, printed-matter-linked shopping in an IT-dependent, printed-matter-linked shopping system comprising a sales method of a merchandise that:

(1) a purchaser shoots by an image shooting information equipment an image section shown in said printed matter for IT-dependent, printed-matter-linked shopping, which has been distributed to said purchaser, and containing a picture (A) of said merchandise as a desired merchandise and a relevant merchandise information code (B) (step 1),

(2) a merchandise information code image in the thus-shot section is converted into electrical signals, and said electrical signals are transmitted to a retailer via a predetermined communication network to order the thus-shot merchandise (step 2),

(3) electrical signals of image information, which have been transmitted corresponding to said order for said merchandise in a predetermined format via said communication network, are received, and are then processed such that a reply corresponding to said image information is sent to confirm said order for said merchandise and to accept said order (step 3),

(4) said merchandise is delivered from said retailer to said purchaser (step 4), and then

(5) an accounting of a merchandise bill is performed (step 5), wherein:

said printed matter for IT-dependent, printed-matter-linked shopping is a printed matter with both of said merchandise picture (A) and said merchandise information code (B) printed with said merchandise image printing ink (a) and said merchandise information code printing ink (b), respectively, in the same merchandise section on a sheet of paper.

[12] A printed matter according to claim 11, wherein said printed matter for IT-dependent, printed-matter-linked shopping is an advertisement printed matter for the sales of merchandises selected from the group consisting of foldouts, merchandise advertisement booklets, merchandise catalogs, merchandise advertisement magazines, and inserted advertisement pages in newspapers or magazines.

[13] A printed matter according to claim 11, wherein

merchandises to be advertised are tangible or intangible, valuable properties for sale, rent or lease, which are selected from the group consisting of everyday life items, office items, information-related items, specialty items, performance/transport-related merchandises, eating/travel/sightseeing-related merchandises, and real estate properties.